

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with street lighting at the intersection of MD 177 (Mountain Road) and MD 100 (Westbound Ramp) in Anne Arundel County. MD 177 (Mountain Road) is assumed to run an east-west direction.

This project involves the addition of an Exclusive/Permissive left turn phase along westbound MD 177 (Mountain Road).

II. INTERSECTION OPERATION

- The intersection is to operate in a NEMA five-phase, fully-actuated mode, with the MD 177 (Mountain) approaches running concurrently. An Exclusive/Permissive left turn phase shall be added for the westbound approach of MD 177 (Mountain Road). Advance loops shall remain in operation along MD 177 (Mountain Road). The MD 10 Off Ramp and the MD 100 Off Ramp shall operate as a split side street phase.
- A full-traffic-actuated, eight-phase controller with six (6) two channel, loop detector amplifiers with associated harnesses housed in a NEMA size "6" base-mounted cabinet shall remain in operation at this intersection.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by the S.H.A. Signal Shop. Contact Mr. Ed Rodenhizer (Dave Swartz) at (410) 787-7650 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

EQUIPMENT LISTS

A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

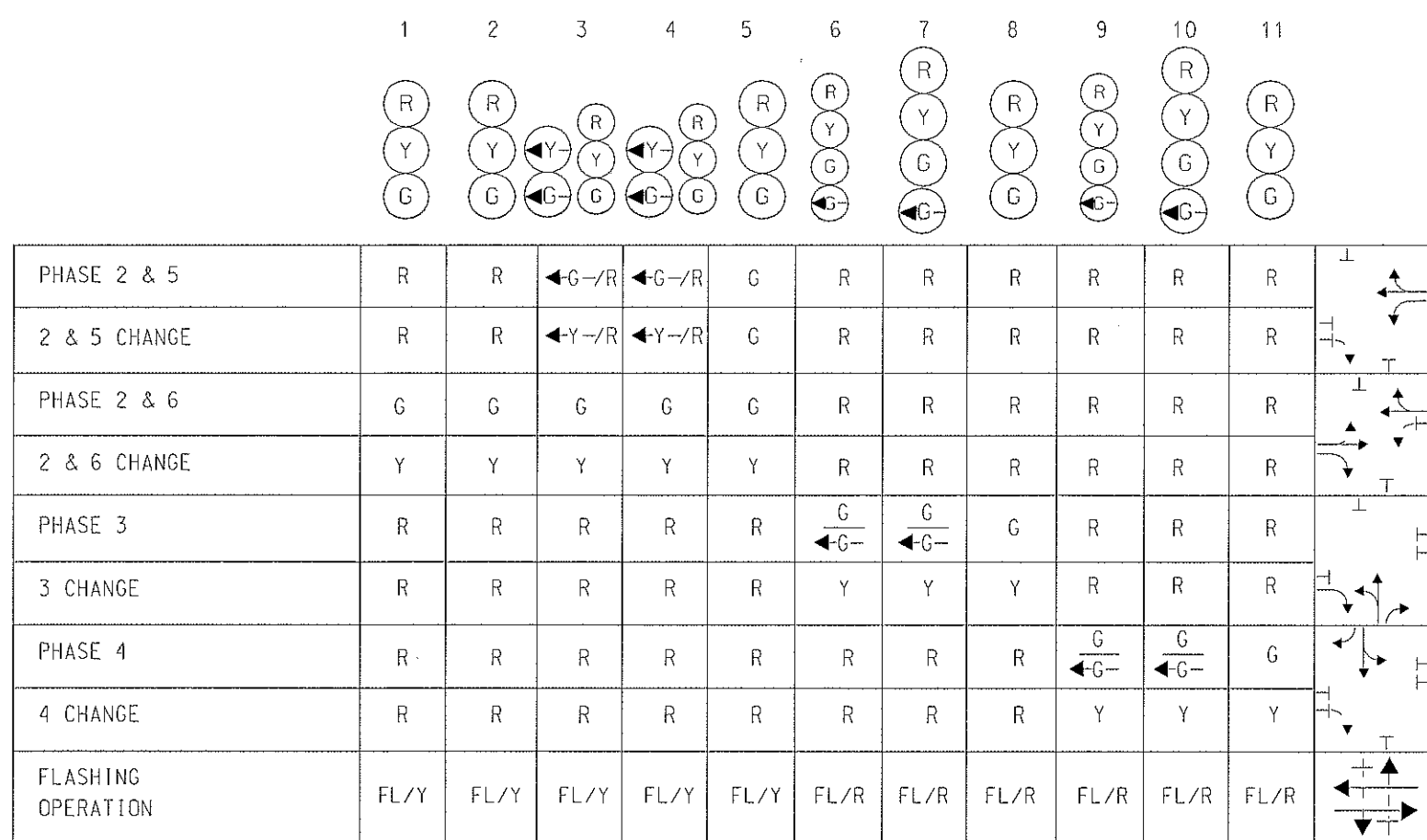
| ITEM NO. | DESCRIPTION | QUANTITY |
|----------|--|----------|
| 9045 | 12", one-way, three-section (R,Y,G) traffic signal head having proper span wire hangers, with tether, balance adjusters and tunnel visors. (polycarbonate black face) | 1 EA |
| 9051 | 12", one-way, five-section (R,YA,Y,GA,G) (left arrows) traffic signal head having proper span wire hangers with tether clamp, balance adjusters and tunnel visors. (polycarbonate black face) | 1 EA |
| 9054 | Combination 8"-12", one-way, five-section (8"-R,Y,G) (12"-YA,GA) (left arrows) traffic signal head having proper span wire hangers with tether clamp, balance adjusters, and tunnel visors. (polycarbonate) (black face) | 1 EA |
| 9090 | Sheet aluminum signs to consist of: | 66.5 SF |
| | R10-12 "LEFT TURN YIELD ON GREEN (BALL)" sign, (36" x 42") span wire mounted. | 1 EA |
| | GUIDE SHIELD ASSEMBLY (36"x69") pole mounted. M3-2 "WEST" (30"x15") M1-5 "MD 177" (36"x30") M6-1 "left arrow" (36"x24") | 1 EA |
| | GUIDE SHIELD ASSEMBLY (36"x69") pole mounted. M3-2 "EAST" (30"x15") M1-5 "MD 177" (36"x30") M6-1 "right arrow" (36"x24") | 1 EA |
| | GUIDE SHIELD ASSEMBLY (30"x51") pole mounted. M3-2 "WEST" (24"x12") M1-5 "MD 177" (30"x24") M6-1 "left arrow" (24"x15") | 1 EA |
| | GUIDE SHIELD ASSEMBLY (30"x51") pole mounted. M3-2 "EAST" (24"x12") M1-5 "MD 177" (30"x24") M6-1 "right arrow" (24"x15") | 1 EA |

EQUIPMENT LISTS (CONT.)

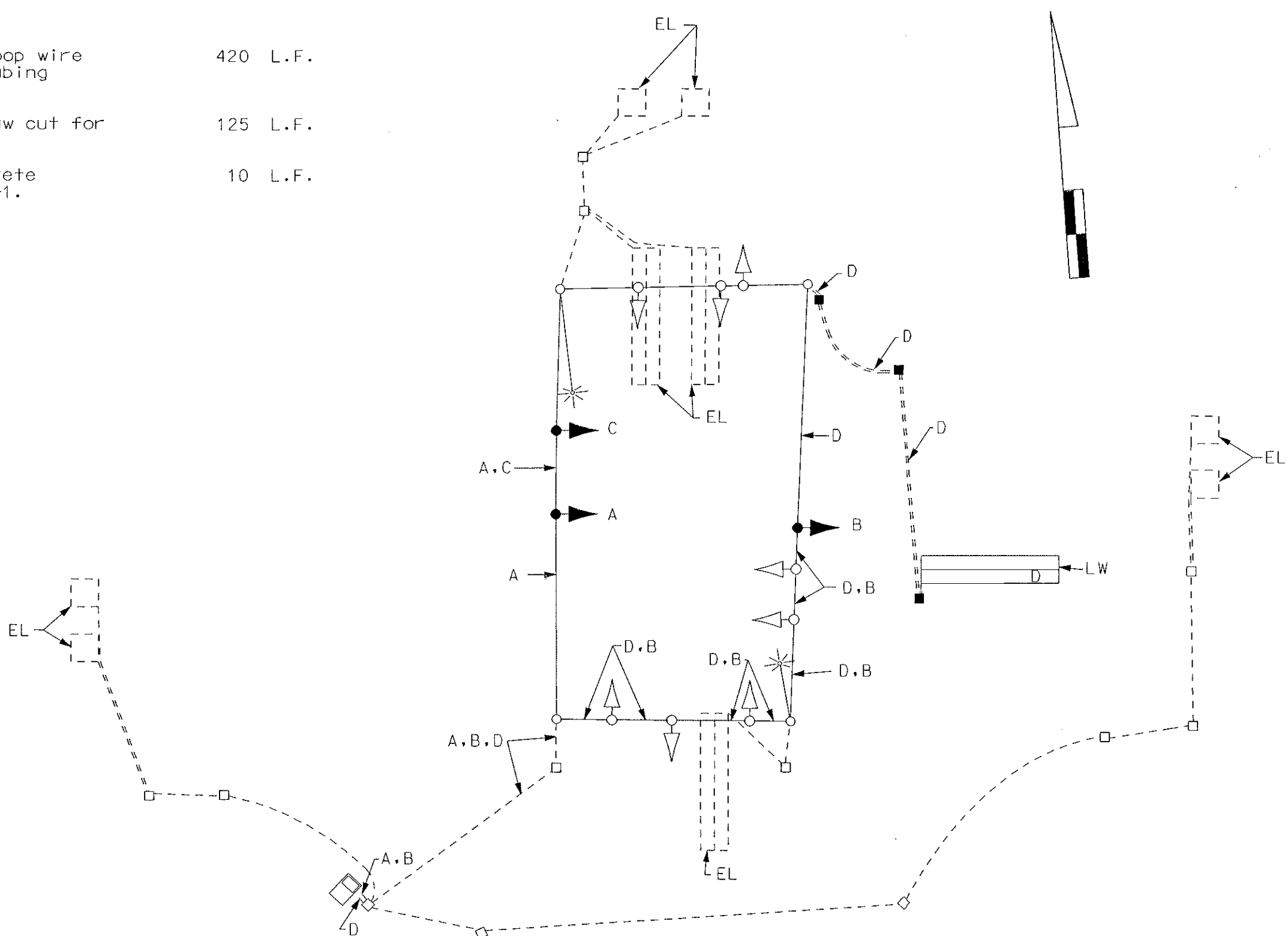
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

| ITEM NO. | DESCRIPTION | QUANTITY |
|----------|---|-----------|
| 1001 | Maintenance of traffic per assignment. | 1 EA |
| 1002 | Mobilization | 1 EA |
| 6003 | Monolithic concrete median 4' wide type A-1. | 10 L.F. |
| 8007 | Furnish and install 3" blind coupling for traffic signal structures, welded & galvanized. | 1 EA |
| 8016 | Furnish and install 3" weatherhead. | 1 EA |
| 8022 | Furnish and install 3" conduit bend in existing base. | 1 EA |
| 8023 | Install signal head | 3 EA |
| 8028 | Remove & dispose of equipment (per assignment). | 1 EA |
| 8033 | Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - trenched. | 70 L.F. |
| 8040 | Furnish and install 2" schedule 80 rigid polyvinyl chloride conduit - bored. | 55 L.F. |
| 8046 | Furnish and install 1" liquid tight flexible non-metallic conduit for detector sleeve. | 10 L.F. |
| 8049 | Furnish and install electrical handhole | 3 EA |
| 8051 | Install overhead sign | 66.2 S.F. |
| 8059 | Furnish and install 2 conductor electrical cable (alum. shielded) | 450 L.F. |
| 8062 | Furnish and install electrical cable - 5 conductor (No. 14 AWG). | 30 L.F. |
| 8063 | Furnish and install electrical cable - 7 conductor (No. 14 AWG). | 425 L.F. |
| 8064 | Furnish and install loop wire encased in flexible tubing (No. 14 AWG) | 420 L.F. |
| 8065 | Furnish and install saw cut for signal (loop detector) | 125 L.F. |
| Neg. | Remove monolithic concrete median 4' wide type A-1. | 10 L.F. |

WIRING DIAGRAM

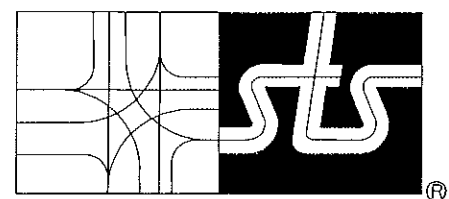


WIRING DIAGRAM



WIRING KEY

- A - 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- B - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- C - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- D - 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED
- EL - LOOP WIRE (NO. 14 A.W.G.) EXISTING
- LW - LOOP WIRE (NO. 14 A.W.G.)
- ES - EXISTING OVERHEAD SERVICE TO BE MAINTAINED BY BGE



STREET TRAFFIC STUDIES, LTD.

400 Greenway NW

Glen Burnie, MD 21061

Ph (410) 590-5500

Fax (410) 590-6637

PTASK4501.dgn

REVISIONS

APPROVALS

TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION

ASST. CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, TRAFFIC & SAFETY



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION

Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION

MD 177 AND MD 100 (WESTBOUND RAMP)

DRAWN BY: J.E.L.

CHECKED BY: D.DODA

SCALE: 1" = 20'

DATE: 4-7-86

F.A.P. NO.

S.H.A. NO.

COUNTY:

LOG MILE:

354125022

ANNE ARUNDEL

02017700.41

TS NO.

219

T.I.M.S. NO.

SHEET NO.

2 OF 2